



Biodiesel

**California Department of Food and Agriculture
Division of Measurement Standards**

**Integrated Energy Policy Report Workshop
April 14, 2009**



Division Mission Statement

Preserve and defend the measurement standards essential in providing the citizens a basis of value comparison and fair competition in the marketplace



Authority

Authority to regulate Weights and Measures and Fuel Products is found in Division 5 of the California Business and Professions Code





Alternative Fuels

CDFA Responsibilities

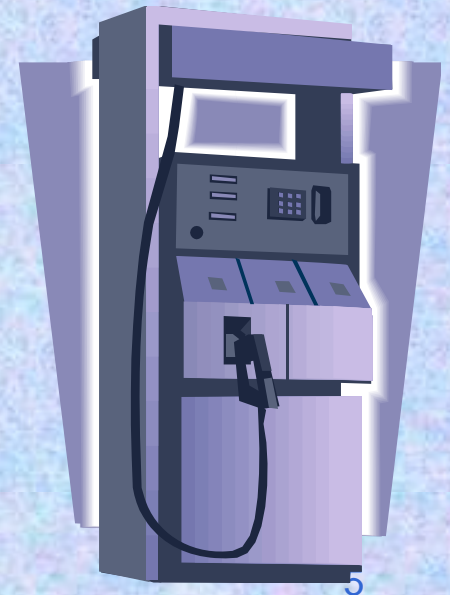
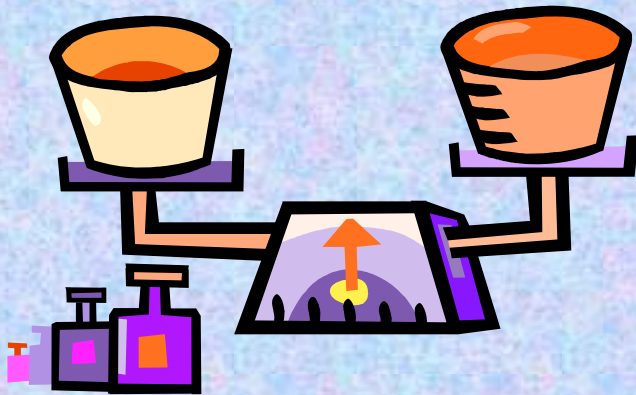
❖ **Division of Measurement Standards (DMS) role in alternative fuel development**

- ✓ **Ensure Measurement Traceability**
- ✓ **Promote Uniform Requirements and Practices**
- ✓ **Ensure Consumers Get What They Pay For**
- ✓ **Level Playing Field in the Marketplace**
- ✓ **Harmonize with International Standards**



Commercial Measuring Device

A device used for ascertaining the measure of any commodity or thing which is sold on the basis of measure; or the determination of the measure of any commodity or thing upon which determination a charge for service is based.





Alternative Fuels

Division Responsibilities

- **Type Evaluation**
 - **National and California Type Evaluation Program**
- **Device Accuracy**
 - **CA Device Compliance Program**
- **Fuel Quality, Advertising, Labeling, and Quantity**
 - **CA Petroleum Products Program**
- **State / County Relationship**



CA Petroleum Products Program

❖ National Standards Organizations Participation

- Establish uniform standards to enhance consumer protection
- Foster fair competition
- Facilitate economic growth and trade



Standards Organizations

❖ ASTM International, Inc.



❖ Society of Automotive Engineers



❖ National Institute of Standards and Technology

National Institute of
Standards and Technology



NIST



Biodiesel





Biodiesel

❖ Established Fuel Standards

- ❑ The Department must adopt recognized consensus organization standards for compression-ignition engine fuels

❖ Biodiesel Blend Standards

- ❑ Current regulation - Must meet ASTM Diesel Fuel Specification D975
- ❑ ASTM recently modified D975 to limit biodiesel content to 5%



Biodiesel

- ❖ **New ASTM Standard (D7467-08) for Biodiesel Blends of 6 to 20 volume percent**
 - ❑ **CDFA in formal rulemaking to modify existing regulations**
- ❖ **B21 to B100 Biodiesel as a motor fuel**
 - ❑ **As a result of recent changes, these blends cannot be used as a legal finished fuel**





Developmental Fuel Variance

- ❖ **Current law allows for controlled sales and limited use of new fuels**
 - ❑ **Provides for fleet testing of new fuels for standards development**
 - ❑ **CDFA has granted 50 variances for this purpose**
 - ❑ **Additional legislation desired to facilitate record review (B&P Code 13570)**



High Concentration Blends

❖ CA distributors and customers want higher blends of Biodiesel Fuel

- ❑ Currently there is no consensus standard
- ❑ CDFA plans to begin method development for these blends and present the work to ASTM

❖ Biodiesel and Biodiesel Blend Labeling

- ❑ Federal and State dispenser labeling is inconsistent
- ❑ CDFA plans to modify rules to be consistent with Federal requirements



Biodiesel Blending Practices

❖ Blending Issues

- ❑ B99 rather than B100 being used for the production of lower concentration levels
- ❑ This pre-dilution practice is inconsistent with current regulations (Section 4147(1))

❖ Splash Blending Technique

- ❑ Can result in non-homogeneous blends
- ❑ Other techniques may be required to obtain consistent blend ratios





Biodiesel Dispenser Issues

- ❖ **Fuel dispensers must be type approved for the product family they are dispensing**
- ❖ **Diesel dispensers are approved to dispense biodiesel blends up to 20 volume percent**
- ❖ **At this time, only 2 manufacturers have type approved commercial dispensers for high concentration biodiesel blends**
- ❖ **Other non weights and measures issues:**
 - **Not Underwriters Laboratories approved**
 - **State and Local Fire Marshals may grant use permits**



Underground Storage Tanks (UST)

State Water Resources Control Board regulations require:

- ❑ **Design and construction of UST and piping be approved by an independent testing laboratory**
- ❑ **System components made of or lined with materials compatible with hazardous materials to be stored**
- ❑ **Approved UST components must include a list of compatible products tested and their measured permeation rate**

SB 1574 (2008 session)

- ❑ **Would have allowed biodiesel blends up to B20 to be stored in UST on an interim basis**
- ❑ **Governor Schwarzenegger vetoed SB 1574**
- ❑ **Storage of alternative fuels needs to be addressed**



Contact Information

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